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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,337	10/18/2000	Jens Wildhagen	450117-02753	5220
20999	7590	06/02/2005		
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			EXAMINER MICHALSKI, JUSTIN I	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/691,337	Applicant(s) WILDHAGEN, JENS	
	Examiner Justin Michalski	Art Unit 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4 and 14-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-4 and 42 is/are allowed.
- 6) ☒ Claim(s) 14, 15, 18, 20, 24, 26, 28-30, 34 and 36-38 is/are rejected.
- 7) ☒ Claim(s) 16, 17, 19, 21-23, 25, 27, 31-33, 35 and 39-41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 14, 15, 18, 20, 24, 26, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Kasser (US Patent 5,428,827).

Regarding Claims 14 and 26, Kasser discloses a method to retrieve RDS information by filtering and transforming an incoming multiplex signal (signal 1) into an amplitude demodulated RDS signal (Fig. 1, reference 8), wherein an amplitude modulated RDS signal is derived on basis of a first intermediate signal (signal from 2 to 7) obtained during an extraction of a stereo-difference signal from the incoming multiplex signal (reference 4), said first intermediate signal lies along a signal path separate from a signal path of an extraction of a stereo-sum signal from the incoming multiplex signal (signal 1); and said first intermediate signal is distinct from all intermediate signals obtained during said extraction of said stereo-sum signal from said incoming multiplex signal.

Regarding Claim 15, Kasser discloses a method for retrieving RDS information (Fig. 1, reference 8) from a multiplex signal (signal 1), comprising the steps of: obtaining, from said multiplex signal, a first intermediate signal from which a stereo-difference signal of said multiplex signal can be extracted (signal from 2 to 4);

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extracting, from said multiplex signal, a stereo-sum signal (reference 4); and deriving an amplitude modulated RDS signal on the basis of said first intermediate signal (reference 8), wherein said obtaining of said first intermediate signal is separate from said extracting of said stereo-sum signal; and said first intermediate signal is distinct from said multiplex signal.

Regarding Claim 18 and 20, Kasser further discloses amplitude demodulation of the amplitude modulated RDS signal (8); and decoding (9) the amplitude demodulated RDS signal.

Regarding Claim 24, Kasser further discloses a sampling rate decimation to obtain carriers for the respective demodulations (2 and 3).

Regarding Claim 34, Kasser discloses an apparatus for retrieving RDS information from a multiplex signal (Fig. 1, signal 1) comprising: means configured and adapted for obtaining, from said multiplex signal, a first intermediate signal from which a stereo-difference signal of said multiplex signal can be extracted (signal from 2 to 4); means configured and adapted for extracting, from said multiplex signal, a stereo-sum signal (reference 4); and means configured and adapted for deriving an amplitude modulated RDS signal on the basis of said first intermediate signal (reference 8), wherein said means for obtaining said first intermediate signal is separate from said means for extracting said stereo-sum signal; and said first intermediate signal is distinct from said multiplex signal.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 28-30 and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kasser (US Patent 5,428,827) in view of Limberg (US Patent 3,787,629).

Regarding Claims 28 and 36, Kasser discloses a method and apparatus for retrieving RDS information from a multiplex signal (Fig. 1, signal 1), comprising the steps of: deriving an amplitude modulated RDS signal (reference 8) from the basis of an intermediate signal (signal from 2 to 4). Kasser does not disclose a tuner but does not disclose the intermediate signal obtained by coherently demodulating said multiplex signal employing a second harmonic of a pilot carrier. Limberg discloses a stereo signal is received by the second harmonic of the pilot signal component of the detected signal (Col. 5, lines, 20-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to demodulate a multiplex signal using a second harmonic of a pilot signal in order to obtain a stereo signal as disclosed by Limberg.

Regarding Claims 29 and 37, Limberg further discloses multiplying said multiplex signal by said second harmonic of said pilot carrier (Col. 5, lines 20-22).

Regarding Claims 30 and 38, Kasser further discloses wherein said first intermediate signal is a signal from which a stereo-difference signal of said multiplex

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signal can be extracted a combination of sampling rate decimation (4) filtering and low-pass filtering (5).

Allowable Subject Matter

5. Claims 2-4 and 42 allowed.
6. Claims 16, 17, 19, 21-23, 25, 27, 31-33, 35, 39-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (571)272-7524. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571)272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SINH TRAN
SUPERVISORY PATENT EXAMINER

JIM